


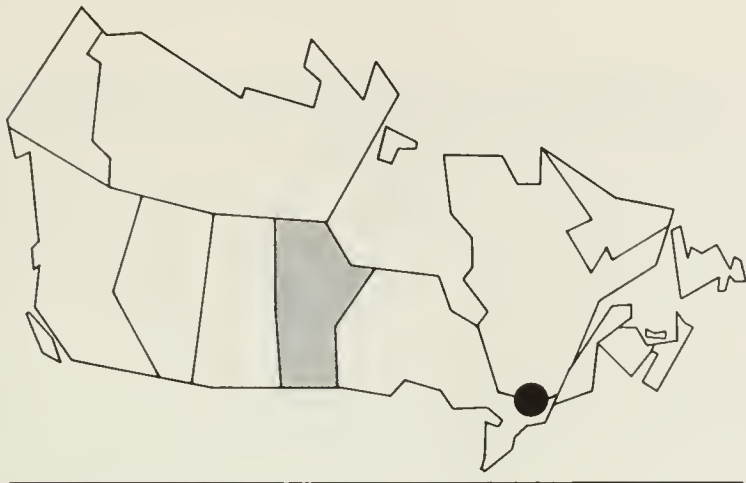


# food and nutrition in day care centers





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CANADA/MANITOBA

## FOOD AND NUTRITION IN DAY CARE CENTERS

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Under the provisions of the Federal Provincial Coordinating Committee, Agriculture Canada has edited and printed this publication in recognition of 1979, the International Year of the Child, and to make it available to all day care centers across Canada.

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## FOREWORD

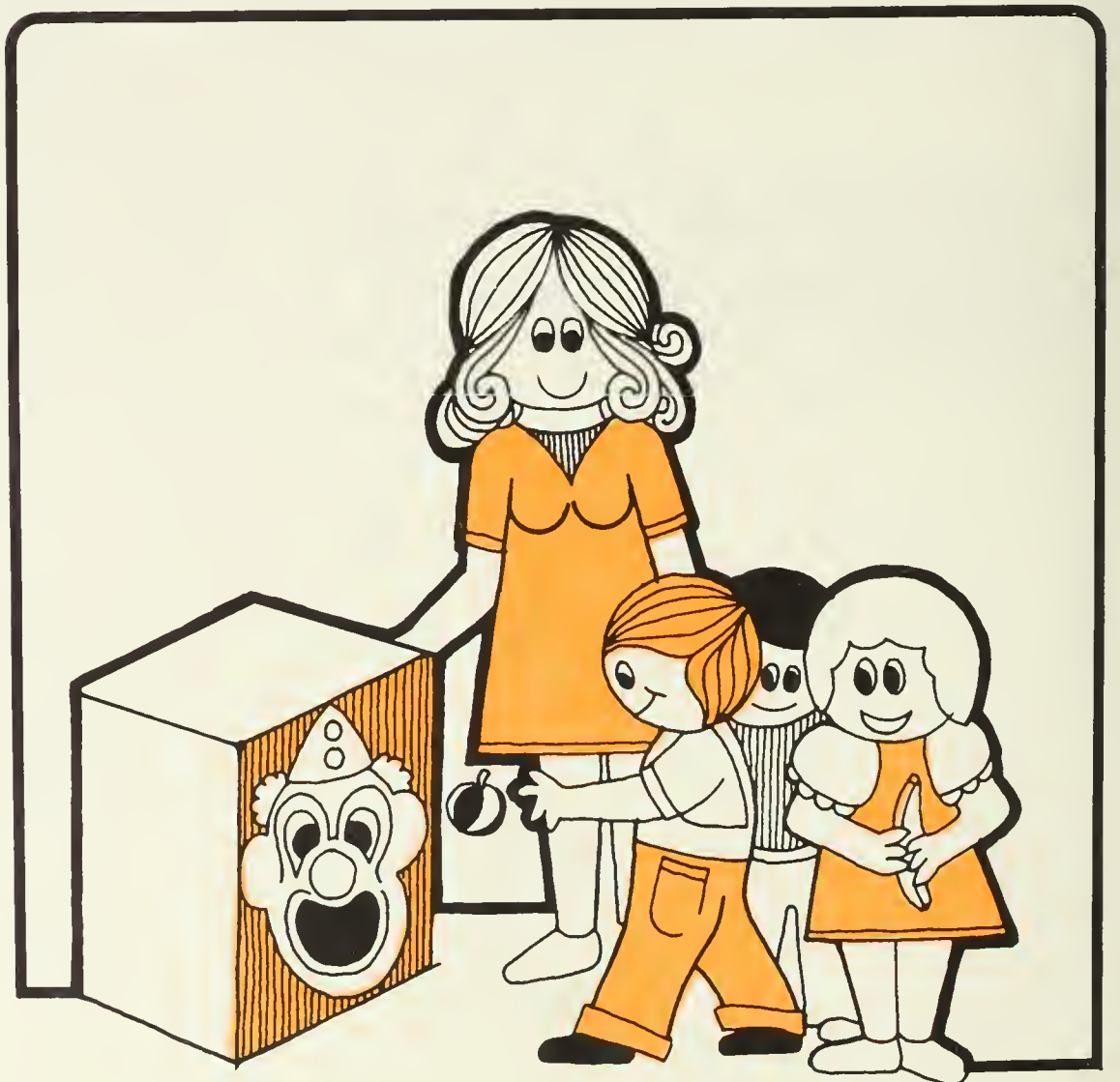
So you've taken on the job of looking after someone else's children all day, and now you've realized that these children need to be fed. If you're looking for help, keep reading.

The children need food. You're right! However, the food you serve should not only meet nutritional needs, but should also provide a valuable learning experience for the child. Food related activities can stimulate curiosity and imagination. They can develop new knowledge and skills, increase vocabulary and create new experiences in smelling, tasting and feeling.

The attitudes and habits associated with food that develop in childhood will be the habits that are carried into adulthood. It is a lot easier to develop good habits in the young than to try to change 'bad' habits in an adult.

Here are some objectives for food service and nutrition programs in all day care centers.

- (a) To plan nutritionally adequate meals and snacks.
- (b) To provide an opportunity for the child to eat a wide variety of foods.
- (c) To provide an opportunity for the child to participate where possible, in the preparation of food.
- (d) To provide an opportunity for the child to learn about new foods and gain a positive attitude towards good foods.





IS IT NUTRITIOUS?

A meal cannot be considered of high quality unless it makes a significant contribution to the child’s nutrient intake. Meals and snacks provided in a day care situation should contribute from one-third to one-half of the child’s nutrient needs. Canada’s Food Guide gives the recommended number of servings needed daily in each food group in order that all the required nutrients for the body are obtained.

Young children need the same nutrients as everyone else, and it is especially important that they receive these needed nutrients if they are to undergo optimum growth and development.

The meal you serve should contain at least one food from each of the four Food Families. The following list is provided as a guide for planning menus. It is a check list to ensure that all food families (groups) are present in the required amounts.

FOOD FAMILY	TIMES SERVED
(1) Milk and milk products	twice/day
(2) Fruits and vegetables	minimum 2 times/day
—citrus fruit or juice or other source of vitamin C	minimum 3 times/week
—green, leafy or yellow vegetables	minimum 3 times/week
(3) Bread, crackers or cereals	twice/day
—enriched or whole grain	
(4) Meat and alternates	minimum once/day
—fish , poultry, eggs, cheese, dried legumes, peanut butter	

In each of the food families (groups) there are many possibilities for wise food choices. According to the likes and dislikes and/or cultural backgrounds of the children, choose menu ideas from these serving suggestions and equivalents.

FOOD GROUP	EQUIVALENTS
<b>(1) Milk</b> (amount per day — two to three servings or 500 - 750 mL)	
—fluid whole milk	
—2% milk (if the child is more than 1 year of age)	
—reconstituted powdered skim milk (if the child is over 2 years of age)	
—yogurt — preferably plain (more costly than milk)	125 mL = 125 mL milk
—Cheese — cheddar, Swiss, process, cottage creamed or uncreamd	20 g = 125 mL milk
—soup — made with milk	125 mL = 125 mL milk
—milk pudding	125 mL = 125 mL milk
(serve only occasionally because of high sugar content)	

Some Indian and Métis children may be lactose-intolerant\* and unable to drink a large amount of milk. If specific day care centers have this problem, other methods will have to be used to ensure the children receive adequate calcium in the diet. Contact a dietitian for lactose-free meal plans.

\*Lactose-intolerant means the body doesn’t have the enzymes to utilize the sugar (lactose) in milk. Symptoms include diarrhea and stomach cramps after drinking a milk product. Cheese does not contain a significant amount of lactose so may be offered instead.

If it is felt that children do not receive vitamin C at home the center should provide a good source daily. A serving is 125 mL of a vegetable, fruit or their juices, or one medium sized vegetable or fruit (such as tomato, potato, 1/2 grapefruit or orange).

Use fresh and raw as much as possible — they are better accepted by young children. Choices should depend on cost and availability.

**(2) Fruits and Vegetables** (amount per day - four to five servings)

- Citrus or source of vitamin C      orange, grapefruit, unsweetened orange juice, or grapefruit juice, vitaminized apple juice, tomato juice, melon, strawberries, broccoli, asparagus, green pepper, cabbage.
- Vitamin A source      green leafy or yellow vegetables — asparagus, broccoli, Brussels sprouts, cabbage, green beans, green cabbage, carrots, lettuce, spinach, squash, sweet potatoes, tomatoes, apricots, oranges, peaches.
- Other fruits and vegetables      Apples, bananas, blueberries, fruit cocktail, seedless grapes, pears, pineapple, prunes, dates, raisins, beans (yellow, lima), beets, cauliflower, celery, corn, cucumber, onion, parsnip, peas, radishes, turnip, winter cabbage, zucchini.

**(3) Bread and Cereals** (amount per day — three to five servings)

- Whole grain or enriched bread, crackers, and plain biscuits made with whole grain or at least partially whole grain
- Whole grain or enriched dry or cooked cereal — flaked or shredded 125 - 200 mL
- Muffin, roll, sliced bread
- Enriched spaghetti, macaroni, or noodles (cooked) — 125 - 200 mL
- Rice — preferably converted or brown (cooked) — 125 - 200 mL

**(4) Meat and Alternates** (amount per day — two servings)

beef, veal, lamb, liver, ham, chicken, turkey, fish, cooked: 60-90 g per serving, cheese: 60 g, eggs: 2, peanut butter: 50-75 mL, dried peas or beans, cooked: 250 mL.

**(5) Fats and Oils** (amount per day — two servings)

butter or margarine: 5 mL per serving  
salad oil

## WHEN PLANNING MEALS

Snacks should have at least two food groups represented.

Example:

Apple sections	Tomato juice	Yogurt
+	+	+
Cheese cubes	Crackers	Cereal-based crackers

Meals should include all four food groups: milk and/or dairy products, breads and/or cereals, fruit and/or vegetables, and meat or alternatives.

Be sure to plan meals and snacks in advance to make shopping easier and also to ensure that the children are receiving a balanced diet.

The capacity of your kitchen and staff is also an important consideration in meal planning. If there is limited freezer space, it would be best to buy canned juice rather than frozen and yogurt rather than ice cream.

Also when planning meals and shopping lists, keep in mind serving sizes. Here are some guidelines when estimating amounts that need to be prepared.

The size of a serving of food for a young child can roughly correspond to the child's age in tablespoons, i.e., a 3-year-old child would have 3 tablespoons of each food per serving.



## Note

Variations can be introduced in the menus using the serving suggestions listed here to accommodate the familiar foods of ethnic groups (for example lentil soup may be more readily accepted by Italian Canadian children than would beans with pork.) Specific examples for the Indian, Métis, Ukrainian or other ethnic groups could be developed by the nutritionist or home economist consulting to the centers.

Avoid the following:

- (1) Drinks made from fruit-flavored crystals, fruit-flavored drinks, soft drinks and chocolate milk are discouraged because of the very high sugar content.
- (2) Cakes, candies, marshmallows, syrup, sweet desserts, donuts and store-bought cookies contain mostly calories and contribute only slightly to the child's nutrient intake. Homemade or bakery oatmeal, peanut butter, date and raisin cookies are exceptions. Also banana, pumpkin or carrot cake with little or no icing is acceptable. These foods should be eaten as part of a meal and not used as snack items.
- (3) Fried foods and potato chips are very high in fat and should be avoided.
- (4) Sugar-coated cereals and snack cereal-based foods again are high in calories and low in food value. Even cheese crisps should be avoided — the cheese flavoring is artificial and therefore they contain few nutrients. Serve chunks of cheese instead.
- (5) Plain jelly dessert contains only sugar, water and gelatin. It is acceptable if fruits or vegetables are added.
- (6) Nuts (except peanut butter) are not recommended because they may cause a small child to choke.
- (7) Popsicles contain only flavoring, sugar and water and should not be served unless they are homemade with unsweetened fruit juice.



### Average Size Serving

food	lunch	snack
Milk	125 - 200 mL	125 - 200 mL
Fruit juice	125 mL	125 mL
Bread	1/2 - 1 slice	1/2 slice
Butter/margarine	2-5 mL	2 mL
Meat, fish, poultry	30 - 60 g	30 g
Egg	1	1/2
Cheese	30 mL	20 mL
Combination vegetable meat dish	50 - 125 mL	50 mL
Potato	30 - 60 mL	30 - 60 mL
Cooked vegetable	30 - 60 mL	30 - 60 mL
Raw vegetable	4 small sticks	4 small sticks
Fruit	1/4 - 1/2 fruit	125 mL or 1/4 fruit
Custard, ice cream, pudding	125 mL	should not be served as snack
Sandwich	1/2 - 1	1/4 - 1/2
Crackers, cookies	1 - 2	1 - 2

Following are 3 weeks of menus and food lists for various facilities. These meals will provide one-third to one-half of a preschooler's (3-to 5- year old) daily nutrient requirements.

### Food List (for 20 Children) — Week #1

#### Milk and milk products

Cheese, cheddar — 750 g  
Cheese spread — 500 g  
Milk — 13 L  
Yogurt, plain — 2.5 kg

#### Breads and cereals

Brown bread — 1/2 loaf (675 g)  
Cracked wheat bread — 2 loaves (675 g each)  
Rye bread — 1 loaf (675 g)  
White bread — 2 loaves (675 g each)  
Whole wheat bread — 1 1/2 loaves (675 g each)  
Cereal-based crackers — 3 boxes (250 g each)  
Soda crackers — 1 box (250 g)  
Spoon size shredded wheat — 1 box (525 g)

### DAY CARE MENUS

#### Week #1 Sink, refrigerator, hot plate only

snack	lunch	snack
<b>Day 1</b>		
Apple quarters — 2	Sardine Sandwich:	Zucchini pieces — 50 mL
Cheese cube — 1	Sardines — 60 g	Soda crackers — 2
	Enriched white bread — 2 slices	Tomato juice — 125 mL
	Butter — 10 mL	
	Carrot curls — 1/2 carrot	
	Orange sections — 1/2 orange	
	Milk — 125 mL	
<b>Day 2</b>		
Hard-cooked egg — 1/2	Peanut butter dip — 50 mL	Spoon size shredded wheat — 12
Peaches — 125 mL	Celery — 1/2 stalk	Milk — 50 mL
	Turnip — 50 mL	Sliced banana — 1/3
	Carrot — 1/2	
	Apple — 1/2	
	Bread — 1 slice	
	Butter — 5 mL	
	Milk — 125 mL	



snack	lunch	snack
<b>Day 3</b>		
Apple juice — 125 mL	Chili con carne with	Banana — 1/2
Cereal-based	beans — 125 mL	Cheese cube — 1
crackers — 2	Cracked wheat bread —	
	1 slice	
	Butter 5 mL	
	Green pepper sticks — 4	
	Canned pears — 125 mL	
	Milk — 125 mL	
<b>Day 4</b>		
Milk — 125 mL	Pea soup — 125 mL	Celery — 1/2 stalk
Carrot sticks —	Whole wheat bread —	Peanut butter — 30 mL
1/2 carrot	1 1/2 slices	Brown bread — 1/2
		slice
Ham cubes — 30 g	Butter — 7 mL	
	Radishes — 4	
	Orange — 1/2	
	Milk — 125 mL	
<b>Day 5</b>		
Plain yogurt —	Hard cooked egg — 1	Broccoli spears — 1
125 mL	Rye bread — 1 slice	Cereal-based
Apple sections — 4	Butter — 5 mL	crackers — 2
Cereal-based	Cucumber slices — 6	Cheese spread —
crackers — 2		15 mL
	Grapefruit sections	
	— 125 mL	
	Milk — 125 mL	

## Week #2 Sink, refrigerator, oven or delivery of main items

snack	lunch	snack
<b>Day 1</b>		
Celery — 1/2 stalk	Ham sandwich:	Dry cereal — 125 mL
Peanut butter—30 mL	Ham — 30 g	Milk — 50 mL
Tomato juice—125 mL	Process cheese spread	Peaches — 50 mL
	— 30 g	
	Asparagus spear — 1	
	Whole wheat bread —	
	1 slice	
	Butter — 5 mL	
	Prunes — 4	
	Milk — 125 mL	
<b>Day 2</b>		
Orange juice—125 mL	Egg Sandwich:	Milk — 125 mL
Bran muffin — 1	Scrambled egg — 1	Parsnip strips — 50 mL
	Lettuce — 1 leaf	Cereal-based
	Cracked wheat bread —	crackers — 2
	1 slice	
	Butter — 5 mL	
	Canned pears — 125 mL	
	Milk — 125 mL	

## Meat and meat alternates

Chili con carne — 10 cans (284 mL each)  
 Eggs — 30  
 Ham — 600 g  
 Peanut butter — 2 kg  
 Peas, dry — 500 g OR  
 Pea soup — 4 cans (284 mL each)  
 Sardines — 12 cans (100 g each)

## Fruits and Vegetables

Apples — 3.2 kg  
 Bananas — 3 kg  
 Oranges — 20  
 Grapefruit, canned — 4 cans (540 mL each)  
 Peaches, canned — 4 cans (540 mL each)  
 Pears, canned — 4 cans (540 mL each)  
 Apple juice — 4 cans (540 mL each)  
 Tomato juice — 4 cans (540 mL each)  
 Broccoli — 1-2 heads  
 Carrots — 3.2 kg  
 Celery — 2 bunches  
 Cucumbers — 5  
 Green peppers — 5  
 Radishes — 8 bunches (10/bunch)  
 Turnip (1 large, 2 small) — 1.4 kg  
 Zucchini (small or medium) — 4-5

## Food List (for 20 Children) — Week #2

### Milk and milk products

Butter or margarine — 1.25 kg  
 Cheese, cheddar — 400 g  
 Cheese, cottage — 1.2 kg  
 Cheese spread — 900 g  
 Milk — 18 L

### Meat and meat alternates

Eggs — 30  
 Ham — 600 g  
 Kidney beans — 2 cans (540 mL each)  
 Peanut butter — 1.25 kg  
 Tuna — 6 cans (198 g each)

### Fruit and vegetables

Apples — 1 kg  
 Bananas — 2 kg  
 Oranges — 15  
 Prunes — 600 g  
 Raisins — 800 g

Peaches, canned — 2 cans (540 mL each)  
 Pineapple, canned in its own juice — 2 cans (540 mL each)  
 Pears, canned — 2 cans (540 mL each)  
 Apple juice — 4 cans (540 mL each)  
 OR  
 Orange juice, frozen — 4 cans (178 mL each)  
 Tomato juice — 8 cans (540 mL each)  
 Asparagus, canned — 2 cans (540 mL each)  
 Celery — 1 head  
 Carrots — 1 kg  
 Cucumbers — 5  
 Green pepper — 5  
 Lettuce — 2 heads  
 Parsnips — 1 kg  
 Potatoes — 10 (about 2 kg)

### Bread and cereals

Brown bread — 1/2 loaf (675 g)  
 Cracked wheat bread — 3 loaves (675 g each)  
 Whole wheat bread — 3 loaves (675 g each)  
 White bread — 1 loaf (675 g)  
 Bran muffins — 20  
 Cereal-based crackers — 3 boxes (250 g each)  
 Ready-to-eat breakfast cereal — 1 box (350 g)

### Miscellaneous

Mayonnaise — 250 mL  
 Salad dressing — 250 mL

snack	lunch	snack
<b>Day 3</b>		
Milk — 125 mL	Tuna Sandwich:	Cheese cube — 1
Baked potato — 1/2	Tuna — 60 g	Crackers — 2
Butter — 2 mL	Whole wheat bread — 2 slices	
	Butter — 10 mL	
	Lettuce — 1 leaf	
	Mayonnaise — 15 mL	
	Carrot sticks — 1/2 carrot	
	Milk — 125 mL	
	Apple — 1/4	
	Orange — 1/4	
<b>Day 4</b>		
Milk — 125 mL	Macaroni & cheese — 125 mL	Egg wedges — 1/2 egg
Brown bread (toasted) — 1/2 slice	Kidney bean salad — 50 mL	Cucumber slices — 6
Butter — 2 mL	Dressing — 15 mL	Apple juice — 125 mL
Banana — 1/2	White bread — 1 slice	
	Butter — 5 mL	
	Orange sections — 1/2 orange	
	Milk — 125 mL	
<b>Day 5</b>		
Cottage cheese — 50 mL	Sandwich:	Tomato juice — 125 mL
Pineapple — 50 mL	Peanut butter — 30 mL	Cereal-based crackers — 2
	Cracked wheat bread — 2 slices	Cheese spread — 15 mL
	Butter — 10 mL	
	Green pepper sticks — 4	
	Raisins — 50 mL	
	Milk — 125 mL	

## Food List (for 20 Children) — Week #3

### Milk and milk products

Butter or margarine — 2.5 kg  
 Cheese, cheddar — 540 g  
 Cheese, cottage — 1.25 kg  
 Milk — 18 L  
 Yogurt — 2.5 kg

### Meat and meat alternates

Ham, canned — 1.4 kg  
 Kidney beans or bean salad — 2 cans (540 mL each)  
 Peanut butter — 1.25 kg  
 Pork and beans — 5 cans (540 mL each)  
 Sardines — 12 cans (100 g each)

## Week #3 Sink, no refrigerator, no stove or hot plate or hot dish delivery

Milk delivered by 10 a.m. Fresh produce, butter and cheese bought fresh daily. All meats are canned.

snack	lunch	snack
<b>Day 1</b>		
Milk — 125 mL	Cheese wedge — 1	Apple juice — 125 mL
Celery — 1/2 stalk	Green pepper sticks — 4	Bran muffin — 1
Peanut butter — 30 mL	Whole wheat bread — 1 1/2 slices	
	Butter — 7 mL	
	Canned peaches — 125 mL	
	Milk — 125 mL	

snack	lunch	snack
<b>Day 2</b>		
Yogurt — 125 mL	Sandwich:	Apple quarters — 2
Cucumber slices — 6	Peanut butter — 30 mL	Cereal-based
Tomato juice — 125 mL	White bread — 2 slices	crackers — 2
	Butter — 10 mL	
	Carrot sticks — 1/2 carrot	
	Orange — 1/2	
	Milk — 125 mL	
<b>Day 3</b>		
Milk — 125 mL	Beans with pork — 125 mL	Orange juice — 125 mL
Banana — 1/2	Whole wheat bread — 2 slices	Digestive biscuits — 2
Cereal-based crackers — 2	Butter — 10 mL	
	Cabbage chunk — 1	
	Canned pears — 125 mL	
	Milk — 125 mL	
<b>Day 4</b>		
Milk — 125 mL	Ham sandwich:	Spoon size shredded wheat — 12
Celery sticks — 1/2 stalk	Ham — 60 g	Milk - 50 mL
Brown bread — 1/2 slice	White bread — 2 slices	Sliced banana — 1/3 banana
Butter — 2 mL	Butter — 10 mL	
	Mustard — 5 mL	
	Turnip sticks — 2	
	Apple quarters — 2	
	Milk — 125 mL	
<b>Day 5</b>		
Cheese cube — 1	Sardine Sandwich:	Cottage cheese — 50 mL
Green peas in pod — 125 mL OR	Sardines — 60 g	Pineapple — 50 mL
Celery sticks — 2	Cracked wheat bread — 2 slices	
Soda crackers — 2	Butter — 10 mL	
	Bean salad — 50 mL	
	Banana — 1/2	
	Milk — 125 mL	

## Fruits and Vegetables

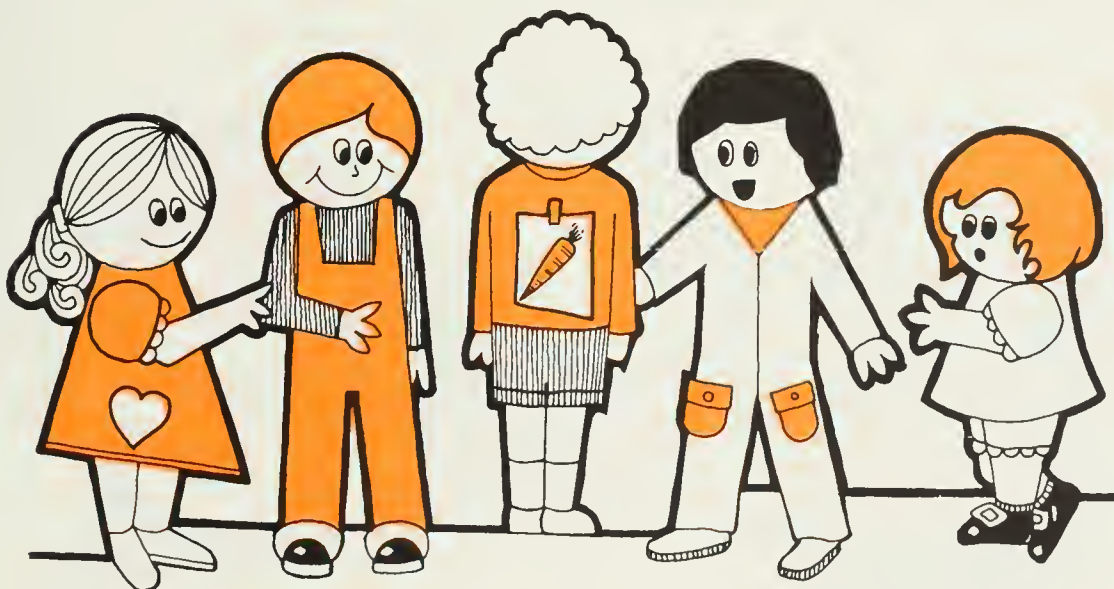
Apples — 10  
 Bananas — 10  
 Oranges — 10  
 Peaches, canned — 4 cans (540 mL each)  
 Pears, canned — 4 cans (540 mL each)  
 Pineapple, canned in its own juice — 2 cans (540 mL each)  
 Apple juice — 4 cans (540 mL each)  
 Orange juice — 4 cans (540 mL each)  
 Tomato juice — 4 cans (540 mL each)  
 Cabbage — 1 large head  
 Carrots — 1 kg  
 Celery — 4 bunches  
 Cucumbers — 5  
 Green peas in pod — 2.3 kg  
 Green pepper — 5  
 Turnip — 1 large or 2 small

## Bread and Cereals

Brown bread — 1/2 loaf (675 g)  
 Cracked wheat bread — 1 1/2 loaves (675 g each)  
 White bread — 3 1/2 loaves (675 g each)  
 Whole wheat bread — 2 loaves (675 g each)  
 Bran muffins — 20  
 Cereal-based crackers — 2 boxes (250 g each)  
 Digestives — 1 package (425 g)  
 Soda crackers — 1 box (250 g)  
 Spoon size shredded wheat — 1 box (525 g)

## Miscellaneous

Mustard — 1 jar (227 g)





## IS IT SAFE TO EAT?

A high quality meal contains not only beneficial nutrients, but must also be free of harmful factors that may cause illness. Even though a food may be packed with nutrients, it cannot be considered high quality if it is the carrier of disease organisms.

The person preparing the food is responsible for the health of the children who are going to eat it. Disease can be transmitted through careless handling of foods; therefore, it is important that the quality of the food you purchase be preserved by proper storage, correct preparation and the use of clean equipment and good food-handling practices.

To make your food service operations safe:

- Wash hands thoroughly with soap and warm water before handling any food, and especially after each visit to the rest room.
- Persons with infected cuts or sores, colds or other diseases should not prepare or serve food.
- Smoking should not be permitted during food preparation or service.
- Do not use cracked or chipped dishes — bacteria may be lodged in the crack.
- All food preparation and eating dishes should be washed and sanitized after each use. Dishwasher rinse water should reach at least 65°C.
- Cooked meat can easily be contaminated; therefore, keep raw eggs, meat, fish and poultry away from cooked products. Be sure to wash your hands with warm soapy water after handling these raw foods.
- Protect dry foods such as flour, cereals, cornmeal, sugar, dry beans and peas from rodents and insects by storing in tightly covered containers.
- Any foods that are served raw, e.g. fruits and vegetables, should be washed thoroughly before serving.
- When cooking fresh food or leftovers, the food temperature should be above 60°C.
- Discard portions of food that have been served, but not eaten.
- Food should be stored below the danger zone temperature of 4°C.
- Refrigerate all leftovers immediately, especially poultry dressing and potato salad. Food should never be left in the danger zone temperature for more than 2 h.
- Storage areas should be cleaned regularly.
- Do not store poisonous or toxic materials, such as soap or insect powders, in the same area as food.
- Never use bulging or rusty cans of food.

## IS THE FOOD APPEALING?

Even though you prepare a nutritious meal that is safe to eat, it is not going to do the children any good if they do not eat it. The food you serve should be fun to eat.

Children prefer:

- Finger foods Hot dogs, vegetable sticks, chicken drumsticks. These foods are easy to pick up and handle, and therefore easier to eat. Of course, utensils will be needed at most meals, but why not have smaller sized utensils that the children can use more easily?
- Different textures Crisp fruit or vegetable, chewy meat, creamy pudding or soup.
- Bright colors
- Mild flavors Bananas, applesauce, carrots and potatoes. Strong flavored foods include onions, cabbage, cauliflower and broccoli, and should be introduced only in small portions. They are often more acceptable raw. Avoid highly seasoned or salty foods. Children have very sensitive taste buds.
- Simple foods Children like to be able to identify the foods on their plates.
- Lukewarm foods Temperature extremes are not liked by most children. Beverages are often better accepted when served at room temperature rather than ice cold.
- Moist foods Puddings, soups, mashed potatoes.
- Surprises Try hiding a piece of fruit at the bottom of a pudding.



# MEALTIME ATMOSPHERE

(A) Mealtimes should be happy times—

- Have the physical setting — tables, chairs, dishes, glasses, utensils — suited for young children.
- Let children make choices whenever possible.
- Have a quiet period before the meal, so that mealtime is quiet and relaxed.
- Serve small portions. Children can always come back for more. If a large plateful of food is placed in front of a child, he may become discouraged and refuse to eat.
- Avoid delays in food service so children do not have to sit and wait.
- Use new foods frequently, but introduce them only one at a time and try to serve them with a familiar, highly acceptable food.
- Don't let the child use his food to gain special attention.
- Desserts should be served casually as a part of the meal and not be made to seem more desirable. Dessert should contribute to the child's nutrient intake (e.g. milk puddings, custards, fruits, ice creams, sherbets, oatmeal cookies) and not simply be a source of empty calories (e.g. pies, rich desserts, cakes, candy).
- Encouraging overeating and forcing the child to clean his plate can prove doubly dangerous. This may lead to overweight in adolescence and also serves as a technique for attracting attention if he/she doesn't want to eat everything. Children can judge when they have had enough. A lifetime of cleaning one's plate when one has already had enough, can lead to a lifetime of overweight.

(B) Mealtimes should also be learning times—

Food service can be a learning experience for the child. Children today frequently have little opportunity to learn in the home about food, where it comes from or how it is prepared. In urban areas few families have gardens. Children do not see vegetables or fruits growing. They may not know that milk comes from cows, that orange juice comes from oranges, that bread is made from flour, or flour from wheat. The more children know about foods, the more familiar they are with a variety of nutritious foods, the more likely they are to appreciate good food habits as they grow older.

There are many ways by which children can learn about food. For example:

- Children can learn from food about color, smell, shape, size, changes in texture, and changes in appearance (i.e. an egg white can be raw, hard-cooked, or beaten and the texture, color, shape and size will change).
- Children can learn about food while preparing and eating it. An example of a complete learning experience using an apple would be:

Name	—apple
classification	—fruit
color	—red, green or yellow
shape	—round
origin	—Canada
where grown	—on trees
texture	—crisp
- The children could learn fractions by cutting into quarters or halves.
- Children learn about food at snack and meal times as the teacher, sitting at the same table with the children, guides the conversation. Children will learn to identify foods by name, where foods come from, how it grows and so forth as well as what to eat in general.
- Children can also learn to help set the table and clean up afterwards. This is a good opportunity to teach them responsibility.
- Children are often more eager to try new foods or to eat foods refused at home, when eating in a group setting. Often, too, a child with broader tastes can encourage his less adventurous neighbors to try a food.



- Children can learn cooperation in getting their food, passing food from one to another and waiting to be served. The child should serve himself and feed himself as much as possible.
- A pleasant emotional atmosphere at meal times can lead the child to make a happy response to food.
- Children learn good table manners and good meal patterns while eating in a pleasant atmosphere, when the teacher sets a good example.
- The importance of cleanliness in dealing with food can be learned from the routine of washing hands before eating.
- Children can learn about food while helping to prepare part of a meal or snack. For example, carrots can be washed under the tap, peeled with a peeler, then cut into strips or shredded with a grater. All shredding and cutting should be done under the careful supervision of the teacher.
- Children can watch food develop in a garden by planting seeds in a paper cup indoors or in an outdoor garden. This lesson can be extended to introduce the children to various parts of a plant, as they examine the whole vegetable, then wash and prepare the edible parts, i.e.
 

Leaves	—lettuce, spinach
Flowers	—broccoli, cauliflower
Seeds	—beans, peas
Roots	—carrots, beets, parsnips
Stems	—celery, rhubarb
- Fine motor coordination can be developed by having the children:
  - spread butter and filling on bread to make a sandwich.
  - slice cheese or bananas (dull knife).
- Eye-hand coordination can be developed by having children pour milk or juice from a light pitcher into their own cup or glass. (This is not easy with paper cups, unless the cup is held by another person).
- Other ways children can help in preparation of foods are mixing skim milk from the powder, preparing sandwich filling such as egg salad, and even making a tossed salad. There are many other learning experiences that the children can enjoy. More examples are included later in the Food Games, Activities, and Song section.



## QUANTITY RECIPES

### Carrot and raisin salad

24 servings (50 mL each)

Ingredients	Mass	Volume	Method
Carrot, finely grated	500 g A.P. 400 g E.P.	1 L	Combine, ingredients and chill.
Celery, thinly sliced	160 g A.P. 140 g E.P.	250 mL	
Apple, unpeeled, chopped	160 g A.P. 140 g E.P.	250 mL	
Peanuts (optional)	80 g	125 mL	
Raisins	70 g	125 mL	
Pepper		Dash	
Salad dressing or mayonnaise		125 mL	Add to salad and toss just before serving. Serve in lettuce cups, if desired.

### Turkey waldorf salad

20 servings (75 mL each)

Ingredients	Mass	Volume	Method
Turkey, cooked, diced	450 g	750 mL	Combine ingredients.
Celery, chopped	240 g A.P. 210 g E.P.	375 mL	
Red apple, unpeeled diced	130 g A.P. 120 g E.P.	250 mL	
Raisins	70 g	125 mL	
Salt		5 mL	
Salad dressing or mayonnaise		125 mL	Add to salad and toss. Chill. Serve in lettuce cups, if desired.

## Beany beef casserole

20 servings (125 mL each)

Ingredients	Mass	Volume	Method
Ground beef	1 kg	1.2 L	Cook beef until lightly browned.
Onion, chopped	160 g A.P. 140 g E.P.	250 mL	Add to beef. Cook until onion is transparent (about 8 min). Drain off excess fat.
Celery, chopped	160 g A.P. 140 g E.P.	250 mL	
Green pepper, chopped	170 g A.P. 135 g E.P.	250 mL	
Baked beans		3 cans (398 mL each)	Combine, stir into beef mixture. Heat thoroughly (about 5 min).
Tomato paste		1 can (156 mL)	
Salt		5 mL	
Pepper		2 mL	

## Ham and noodle casserole

22 servings (125 mL each)

Ingredients	Mass	Volume	Method
Onion, chopped	160 g A.P. 140 g E.P.	250 mL	Sauté in fat until onion is transparent.
Green pepper, chopped	170 g A.P. 135 g E.P.	250 mL	
Fat	50 g	50 mL	
All-purpose flour	30 g	50 mL	Blend into fat and vegetables.
Pepper		5 mL	
Dry mustard		5 mL	
Milk		1 L	Gradually add to vegetables. Stir and cook until smooth and thick.
Cheddar cheese, grated	200 g	500 mL	Add to vegetable mixture and stir until melted.
Ham, cooked, chopped	900 g	1.5 L	Combine ham, peas and cooked noodles with sauce. Turn into greased baking dish. Top with buttered crumbs. Bake 20 min at 180°C.
Frozen peas		500 mL	
Medium noodles uncooked	250 g	1.2 L	
cooked	650 g	1 L	
Buttered soft bread crumbs		250 mL	



### Macaroni celery cheese casserole

20 servings (125 mL each)

Ingredients	Mass	Volume	Method
Onion, chopped	60 g A.P. 55 g E.P.	100 mL	Sauté onion and celery in fat until onion is transparent.
Celery, chopped	160 g A.P. 140 g E.P.	250 mL	
Fat	50 g	50 mL	
Condensed cream of celery soup		2 cans (284 mL each)	Combine ingredients. Add to vegetables.
Water		350 mL	
Skim milk powder	50 g	125 mL	
Salt		5 mL	
Pepper		Dash	
Process cheese, grated	300 g	750 mL	Add to soup mixture and stir until melted.
Macaroni, uncooked	600 g	1 L	Add to sauce. Heat thoroughly (about 5 min).
cooked	1.9 kg	2 L	

### Poultry stew

20 servings (125 mL each)

Ingredients	Mass	Volume	Method
Onion, chopped	225 g A.P. 200 g E.P.	375 mL	Cook in boiling, salted water until just tender (about 10 min). Drain and reserve 1 L liquid.
Carrot, sliced	350 g A.P. 300 g E.P.	500 mL	
Potato, cubed	350 g A.P. 310 g E.P.	400 mL	
Bouillon cubes		2	Combine bouillon cubes with liquid from vegetables.
Liquid from vegetables		1 L	
Canned mushrooms, sliced, drained		1 can (284 mL)	Sauté mushrooms in fat.
Fat	50 g	50 mL	
All-purpose flour	80 g	100 mL	Blend into mushroom mixture. Gradually add liquid from vegetables with bouillon cubes. Stir and cook until smooth and thick.
Skim milk powder	50 g	125 mL	
Paprika		3 mL	
Salt		5 mL	
Frozen peas	340 g	500 mL	Combine with vegetables. Add to sauce. Heat thoroughly (about 10 min). Stir occasionally.
Chicken or turkey, cooked, diced	450 g	750 mL	

## Vegetable turkey chowder

20 servings (125 mL each)

Ingredients	Mass	Volume	Method
Celery, chopped	80 g A.P. 70 g E.P.	125 mL	Combine the following ingredients and simmer 15 min.
Carrots, diced	250 g A.P. 150 g E.P.	250 mL	
Potatoes, cubed	500 g A.P. 400 g E.P.	500 mL	
Onion, chopped	60 g A.P. 55 g E.P.	100 mL	
Poultry seasoning		1 mL	
Chicken bouillon or stock		1.5 L	
Skim milk powder	100 g	250 mL	Combine skim milk powder and flour.
All-purpose flour	45 g	75 mL	
Water		500 mL	Blend into flour mixture. Add to cooked vegetables. Cook for 8 min.
Turkey, cooked chopped	200 g	250 mL	
Canned peas, drained		1 can (284 mL)	

## Beef vegetable soup

20 servings (125 mL each)

Ingredients	Mass	Volume	Method
Ground beef	500 g	625 mL	Cook beef until lightly browned.
Onion, chopped	80 g A.P. 70 g E.P.	125 mL	Add onion to beef and cook until onion is transparent. Drain off excess fat.
Canned tomatoes		1 can (796 mL)	
Salt		5 mL	Combine tomatoes, seasonings and vegetables. Add to meat mixture.
Pepper		1 mL	
Thyme		0.5 mL	
Canned mixed vegetables		1 can (398 mL)	
Skim milk powder	150 g	375 mL	Combine. Add to soup and heat thoroughly (about 10 min).
Cold water		1 L	

## Yogurt

20 servings (100 mL each)

Ingredients	Mass	Volume	Method
Skim milk powder		500 mL	Combine ingredients.
Lukewarm water		1.2 L	
Evaporated milk		1 can (425 mL)	
Swiss-style plain commercial yogurt OR homemade		50 mL	Stir into milk mixture and mix well. Pour into warm sterilized jars, filling to within 2.5 cm from top. Cover with plastic wrap, then lids. Place in pan of lukewarm water (45°C) so that water is level with top of yogurt. Cover pan and put in warm place to maintain water temperature. The centre of the top of a 75 cm stove with oven set at about 110°C is a suitable place. Allow to stand, without disturbing, until set (2 to 4 h). Refrigerate overnight. May be stored in refrigerator for about 2 weeks. Makes about 2 L.

## Flavored yogurt

With jam — Stir 25 mL jam into 250 mL yogurt and refrigerate 2 h to set and blend flavors.

With fruits — Make as plain yogurt, but add 25 mL sugar to milk. Stir 50 mL sliced or mashed fresh fruit sweetened with 15 mL sugar OR 50 mL chopped canned fruit and 25 mL syrup into 250 mL sweetened yogurt. Refrigerate 2 h to set and blend flavors.



## Granola bars

48 bars (5 cm x 2.5 cm each)

Ingredients	Mass	Volume	Method
All-purpose flour	260 g	425 mL	Sift together.
Skim milk powder	50 g	125 mL	
Salt		5 mL	
Baking soda		5 mL	
Butter	300 g	300 mL	Cream.
Brown sugar	230 g	375 mL	
Eggs		2 OR 100 mL	Beat into butter and sugar mixture, then stir into dry ingredients until well blended.
Corn syrup		50 mL	
Orange rind, finely grated		7 mL	
Vanilla		5 mL	
Unsweetened wheat germ	65 g	125 mL	Combine and mix with batter. Spread mixture into greased 3.5 L pan (33x21x5 cm). Bake at 180°C until browned (about 25 min). Cool slightly and cut in bars.
Rolled oats	150 g	375 mL	
Shredded coconut	60 g	175 mL	
Nuts, chopped	100 g	175 mL	
Sesame seed	50 g	75 mL	

## SNACK TIME

Are snacks bad for the children?

Definitely not!

If the children are with you all day, they are active and undergoing a period of rapid growth, so they need more than one main meal during the day. Their stomachs are still small and may not be able to hold enough food for a 4 to 5 hour interval. Also, there is a possibility that they left home that morning without breakfast, or they may have a long wait before they are served supper. For these reasons, snacks should be regularly scheduled between meals and should be substantial.

### When Should They be Served?

A snack is needed mid-way between breakfast and lunch — before 10:00 a.m., and mid-way between lunch and supper about 2:30-3:30 p.m. The snack, however, should be served at least 1 1/2 hours before the next meal, so as not to spoil the child's appetite for that meal.

### What Should be Served?

Snacks should not be just something for the child to eat that will fill him up. The snack should make a worthwhile contribution to his daily nutrient intake. If these nutritious snacks are made attractive and interesting, then the child will find them more appetizing and be more likely to develop good snacking habits and ask for nutritious foods at home.

## Serve 'Happy Snacks'

These are snack foods that come from the four food families and contribute toward a healthy body and glowing smile:

## Do Not Serve 'Sad Snacks'

These are snack foods that contain few nutrients, mostly calories and therefore make the body sad:

## 'HAPPY SNACKS' !

### Milk Family

- milk
- eggnog
- milk shake (R)\* (without sugar)
- milk drinks,
  - eg. orange chiller (R)
  - peanut butter milk (R)
- cream soup (in a mug)
- yogurt, plain or with fruit

### Meat Family

- cheese cubes or sticks
- meat cubes
- meat and cheese kabob (R)
- peanut butter or cheese spread on crackers
- hard cooked egg

### Fruit and Vegetable Family

- unsweetened juice, e.g. apple, grape, tomato, orange
- raw fruit, e.g.
  - apple wedges or slices
  - whole or sliced bananas
  - fruit kabobs — e.g., apple cubes, banana slices, seedless grapes with cheese cubes
  - peach wedges
  - pear wedges
  - green grapes (seedless)
  - cherries (pitted)
  - melon cubes
  - berries, e.g. raspberries, strawberries, blueberries
- fruit slushes (R)
- raw vegetables, e.g. carrot sticks or coins, radish roses, broccoli, cucumber slices or sticks, tomato wedges, cherry tomatoes, cabbage wedges, green pepper sticks, turnip sticks, celery, cauliflower.
- raw vegetable dip (R)
- vegetable juices
- celery stuffed with peanut butter, cream cheese, or seasoned cottage cheese
- vegetable soup (in a mug)

## 'SAD SNACKS'

chocolate milk

- fruit drinks
- potato chips

\*R — recipe can be found in recipe section.

## 'HAPPY SNACKS' !

### Bread and Cereal Family

- muffins
- caraway bread sticks (R)
- bread shapes (R)
- crackers
- whole wheat toast
- melba toast
- quick breads

### Other Snacks

## 'SAD SNACKS'

- pastry
- donuts
- sugar coated cereal
- gooey cakes
- cocktail snacks
- cookies

Serve happy snacks from two of the food families every day so the children can enjoy variety as well as a balanced diet.

- candy
- soft drinks
- tea, coffee
- drinks made from flavored fruit crystals

## RECIPES

Following are recipes for the snack ideas above. They are all nutritious snacks and some are easy enough for the children to help.

### BANANA MILK SHAKE

- |                           |                  |
|---------------------------|------------------|
| 250 mL sliced ripe banana | 250 mL skim milk |
| 2 mL vanilla              |                  |

Mash banana and beat until creamy. Stir in vanilla and milk. Chill and serve. Makes about 500 mL

### ORANGE CHILLER

- |                  |  |
|------------------|--|
| 1.25 L skim milk | 1 can (178 mL) frozen orange juice concentrate |
|------------------|--|

Combine half the milk and the orange juice concentrate in a large jar or pitcher. Mix well. Add remaining milk. Mix well and chill. Makes about 1.5 L.

### PEANUT BUTTER MILK

- |               |                            |
|---------------|----------------------------|
| 1 L skim milk | 75 mL smooth peanut butter |
|---------------|----------------------------|

Gradually add milk to peanut butter in bowl. Stir until smooth and thin. Mix well and chill. Stir before serving. Makes about 1 L.

### FRUIT SLUSHES

Take some concentrated frozen juice out of freezer and let stand at room temperature for about 1/2 h so juice will be right consistency for pouring. Pour over finely crushed ice in a paper cup.

### DIP FOR RAW VEGETABLE STICKS

Use small curd cottage cheese. If blender is available, whip cheese until smooth. To the cottage cheese, add one or more of the following: ketchup, chili sauce, seasoning salt, grated cheddar cheese.

### FRUIT KABOBS

Banana wheels, apple wedges, orange segments, grapes, pineapple, or other pieces of fruit, alternated on sticks.  
— Be careful that children are not running around with the sticks in their mouths.

### MEAT AND CHEESE KABOBS

Cut cooked hot dogs or luncheon meat in cubes. Alternate on a stick with pieces of cheese, cherry tomato, grape, celery, or other fruit or vegetable.



## Songs

DRINK YOUR MILK (Tune: Row,  
Row, Row Your Boat)

Drink, drink, drink, my milk  
Drink it every day  
Merrily, merrily, merrily, merrily  
It helps me on my way.

Eat, eat, eat my meat,  
Eggs, or beans each day  
Protein really helps me grow  
Each and every way.

Chew, chew, chew my fruit  
And vegetables every day  
They give me lots of vitamins  
To help me work and play.

Spread, spread, spread my bread  
Cover it with what I wish  
Peanut butter, cheese spread, too,  
Make it so delish.

Taste, taste, taste my food  
At every single meal  
Then I'll have my basic four  
and healthy I will feel.

### BREAKFAST

(Tune: Are You Sleeping)

Breakfast's ready, breakfast's ready  
Sister Sue, Sister Sue,  
We are having pancakes  
We are having pancakes  
Just for you. Just for you.

Breakfast's ready, breakfast's ready  
Brother Bill, Brother Bill,  
Scrambled eggs and bacon  
Scrambled eggs and bacon  
Eat your fill. Eat your fill.

Come to breakfast, come to breakfast  
On the run, on the run,  
Fruit and milk and muffins  
Fruit and milk and muffins  
For everyone, everyone.

(For variety: make up new verses  
using different breakfast food)

SHE'LL BE EATING WHEN SHE  
COMES (Tune: She'll be Coming  
Round the Mountain)

She'll be eating good raw cabbage  
When she comes, when she comes  
She'll be eating good raw cabbage  
When she comes, when she comes  
She'll be eating good raw cabbage  
She'll be eating good raw cabbage  
She'll be eating good raw cabbage  
When she comes.

### MINI-PIZZA

1 package English muffins OR  
1 package refrigerator dough  
1 can (213 mL) tomato sauce  
250 mL grated cheese

Chopped mushrooms (optional)  
Chopped green pepper (optional)  
Salami slices (optional)

Slice muffins in half, or use thin circles of refrigerator dough. Spread with tomato sauce and sprinkle with cheese. Other items may be added to topping. Bake 10 min at 230°C. Cut in wedges and serve.

### CARAWAY BREAD STICKS

24 slices enriched bread  
125 mL margarine, melted

50 mL caraway, (poppy or  
sesame) seeds

Trim crusts from bread. Place slices close together on a cookie sheet. Brush with melted margarine. Sprinkle caraway seeds evenly over top. Toast at 180°C until crisp and golden brown (about 2 min). Cut each slice into 3 strips. Serve hot or cold. Makes 72 strips.

### BREAD SHAPES

Use different shaped cookie cutters to cut shapes out of enriched and/or whole grain bread slices. The bread shapes may be eaten plain or spread with peanut butter or cheese spread. The leftover bread pieces can be saved and used for bread pudding or bread crumbs.

### SUPER PEANUT BUTTER SANDWICH

250 mL peanut butter  
2 ripe bananas  
375 mL chopped raisins  
500 mL grated carrot

Dash salt  
75 mL mayonnaise or salad  
dressing  
24 slices buttered bread

Combine all ingredients except bread. Spread on 12 slices of buttered bread. Top with 12 more bread slices. Cut into quarters. Makes 48 quarter sandwiches.

### BANANA FRAPPE

500 mL pineapple or orange juice  
2 bananas, cut in pieces

Dash nutmeg

Add juice then bananas to blender. Process at low speed until smooth. Serve in chilled glasses. Sprinkle with nutmeg. Makes 6 servings.

## FOOD GAMES, ACTIVITIES AND SONGS

### Tasting Party

Use snack time to introduce the children to new taste experiences. A large attractive tray of raw vegetables and fruits will encourage them to try new things.

Some tasty raw vegetables are broccoli, cabbage, carrot, celery, cauliflower, cucumber, radish, tomato, turnip, zucchini.

### Summer Picnic

Eating outdoors is always fun for children. With a little thought and care, it can be an outdoor adventure. You can simplify any picnic by putting your meal on a skewer! Try a cube of cheese, ham (any meat) along with pineapple chunks, cherry tomatoes, pickles, etc. on a skewer. The same will work for dessert...whether cookies and marshmallows for toasting or just a selection of fruits. Be careful, however, of children running with sticks or skewers.

## Feel Bag

Have different raw fruits and vegetables in a bag. Let the children put their hand in the bag and feel the different produce and encourage them to identify it. If they guess correctly, they get to keep the fruit or vegetable and may want to share it with a friend. When the children have guessed all the vegetables, have a tasting party so the children can experiment with tasting them all.

## Puppet Shows

All children love puppet shows. Make up a simple script to teach about:  
breakfasts  
snacks  
vegetables and fruits etc.

Short stories will be all that are necessary to maintain their short attention span. Older children may be able to participate and talk to the puppets.

## Field Trips

Coordinate a field trip with special menu items - shopping trip to the supermarket to purchase ingredients for a salad; visit to a pizzeria followed by making individual pizzas with refrigerated biscuit dough; field trip to dairy farm could motivate making butter, yogurt or butter-milk, visit to a poultry farm could complement cooking projects with eggs.

## Mobiles

Cut pictures of foods out of magazines and glue to cardboard. Cut out these pieces as well. Choose foods from the four food groups, i.e. milk, meats, fruits and vegetables, bread and cereals. Make mobiles with the pictures and reinforce the good foods by referring to them often.

## Snack Time

Children can help prepare snacks, if supervised when using scissors or a knife. Here are some things they can do:

- pass the napkins;
- pour the milk or juice;
- arrange cookies, crackers, on plate;
- cut and place cheese slices on crackers;
- divide fruit, vegetable pieces, etc. among those at their table;
- pop the corn;
- hard cook the eggs;
- help wash and peel carrots, cut green pepper sticks, slice bananas in two, cut apple wedges, cut oranges in four, etc.;
- help butter the bread, cut the bread and arrange it on plates;
- spread peanut butter or cheese spread in celery sticks;
- prepare snack-on-a-toothpick.

## Food Treasure Hunt

Have different foods (or pictures of food) hidden around the room. Have the children hunt for things that are red and crunchy (apples) or yellow and soft (bananas) or brown and hard (potatoes)

NOTE: Have the children make up new verses. e.g.  
She'll be eating whole wheat bread  
...  
She'll be canning ripe tomatoes ...  
She'll be catching perch and catfish.

## ACKNOWLEDGEMENTS

*Thank you, the children and staff of the Glebe Parents Day Care Centre, Ottawa for testing the quantity recipes in this publication.*

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Manitoba Department of Health & Social Development — 1978

The Mother-Child Cookbook, 1969  
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Food Safety — It's All In Your Hands  
Danger Zone in the Kitchen  
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    Educational Services  
    Field Operations  
    Health Protection Branch  
    Health and Welfare Canada  
    Ottawa, Ontario K1A 1B7

Help! My Child Won't Eat Right  
A Guide to Better Nutrition 1973  
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Acropolis Books Ltd, Washington, D.C. 20009 USA

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Manitoba Department of Health

## Resources

Quantity recipes and 'Guide for Converting Quantity Recipes to the Metric System' are available from:  
    Food Advisory Division      Agriculture Canada  
    Ottawa, Ontario K1A 0C5

Agriculture Canada 'Publications for the Home' available from:  
    Information Services  
    Agriculture Canada  
    Ottawa, Ontario K1A 0C7



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## KITCHEN METRICS

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### VOLUME

Use metric measures for metric recipes. Measures are marked in millilitres (mL) and are available in the following sizes:

1000 mL = 1 L

500 mL

250 mL



250 mL

125 mL

50 mL



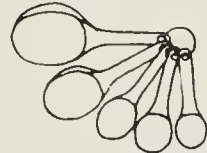
25 mL

15 mL

5 mL

2 mL

1 mL



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### TEMPERATURE

Most commonly used oven temperatures

°C replaces °F

100 200

150 300

160 325

180 350

°C replaces °F

190 375

200 400

220 425

230 450

Refrigerator temperature: 4°C replaces 40°F

Freezer temperature: -18°C replaces 0°F

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### MASS

1 kg (1000 g) is slightly more than 2 pounds

30 g is about 1 ounce

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### LENGTH

1 cm (10 mm) is slightly less than 1/2 inch

5 cm is about 2 inches

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### PRESSURE

Pressure for pressure cookers and canners is measured in kilopascals (kPa) instead of pounds per square inch (PSI).

kPa replaces PSI

35 5

70 10

100 15

# Eat a variety of foods from each group every day

## milk and milk products

Children up to 11 years 2-3 servings

Adolescents 3-4 servings

Pregnant and nursing women 3-4 servings

Adults 2 servings

## meat and alternates 2 servings



## bread and cereals 3-5 servings

whole grain or enriched

## fruits and vegetables 4-5 servings

Include at least two vegetables.



Health  
and Welfare  
Canada

Santé et  
Bien-être social  
Canada

Operation  
Lifestyle



# Eat a variety of foods from each group every day

Energy needs vary with age, sex and activity. Foods selected according to the guide can supply 1000-1400 calories. For additional energy, increase the number and size of servings from the various food groups or add other foods.

## milk and milk products

Children up to 11 years	2-3 servings
Adolescents	3-4 servings
Pregnant and nursing women	3-4 servings
Adults	2 servings

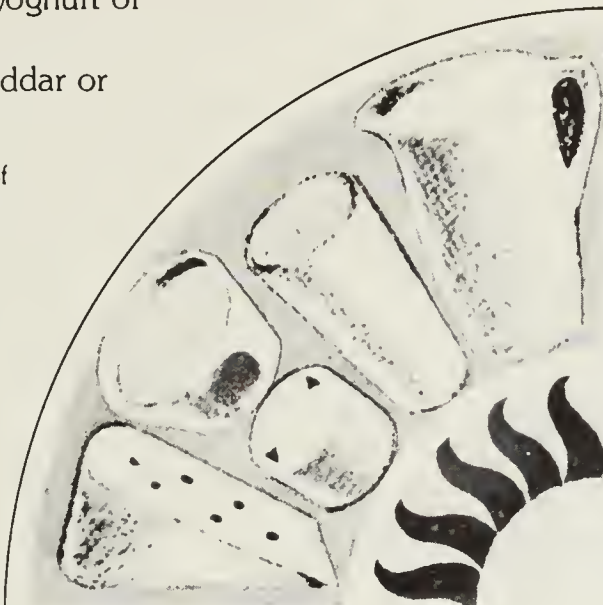
Skim, 2%, whole, buttermilk, reconstituted dry or evaporated milk may be used as a beverage or as the main ingredient in other foods. Cheese may also be chosen.

### Examples of one serving

250 ml (1 cup) milk, yoghurt or cottage cheese

45 g (1½ ounces) cheddar or process cheese

In addition, a supplement of vitamin D is recommended when milk is consumed which does not contain added vitamin D.



## meat and alternates

### 2 servings

### Examples of one serving

60 to 90 g (2-3 ounces) cooked lean meat, poultry, liver or fish

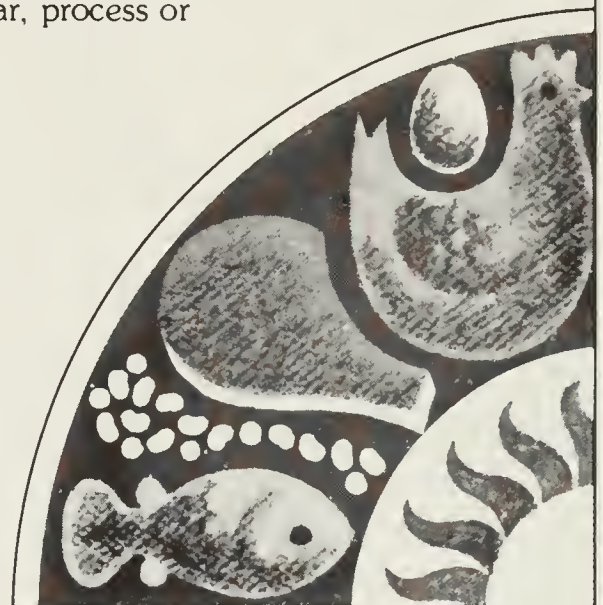
60 ml (4 tablespoons) peanut butter

250 ml (1 cup) cooked dried peas, beans or lentils

80 to 250 ml (⅓-1 cup) nuts or seeds

60 g (2 ounces) cheddar, process or cottage cheese

2 eggs



## bread and cereals

### 3-5 servings

whole grain or enriched. Whole grain products are recommended.

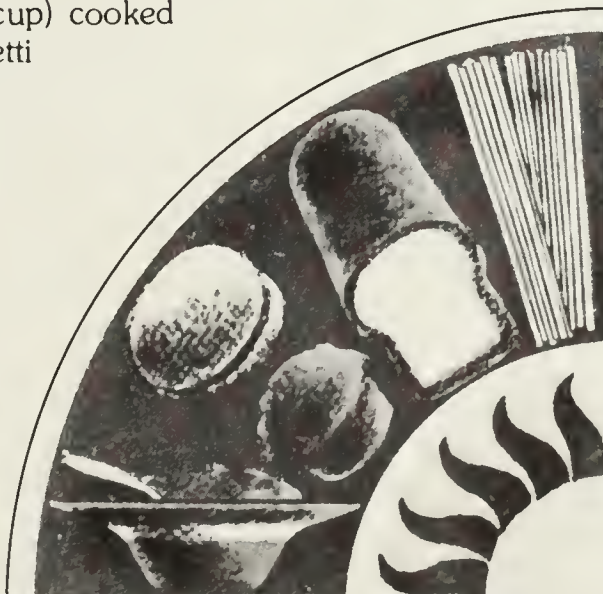
### Examples of one serving

1 slice bread

125 to 250 ml (½-1 cup) cooked or ready-to-eat cereal

1 roll or muffin

125 to 200 ml (½-¾ cup) cooked rice, macaroni, spaghetti



## fruits and vegetables

### 4-5 servings

Include at least two vegetables.

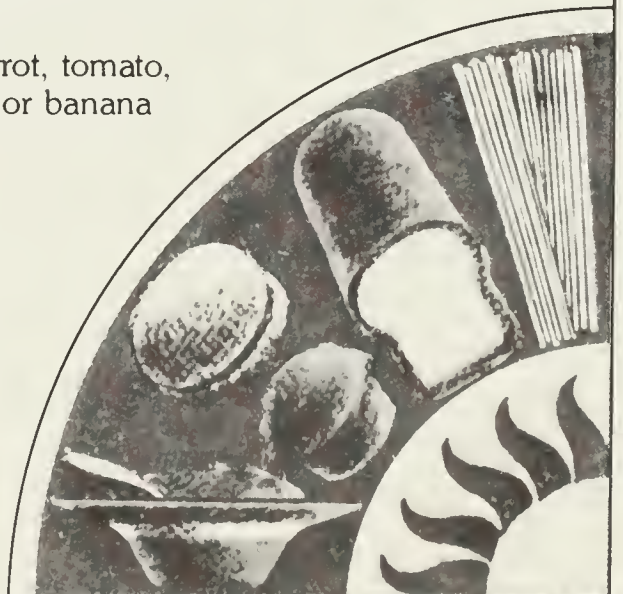
Choose a variety of both vegetables and fruits — cooked, raw or their juices. Include yellow or green or green leafy vegetables.

### Examples of one serving

125 ml (½ cup) vegetables or fruits

125 ml (½ cup) juice

1 medium potato, carrot, tomato, peach, apple, orange or banana







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